



GRASSHOPPER SPECIES ACCOUNTS



DAN JOHNSON

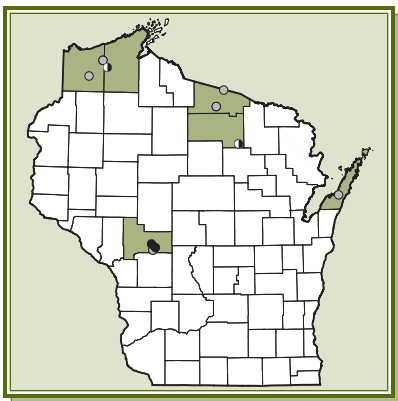
Acridinae

Gomphocerinae

Cyrtacanthacridinae

MELANOPLINAE

Oedipodinae



MELANOPLINAE

Booneacris glacialis canadensis (E.M. Walker)

Northern Wingless Grasshopper

Description: Wingless, green, medium-sized grasshopper. Hind femora banded and coral red below and inside. Tibiae blue-green.

Range: Ontario and Minnesota east to New Brunswick. The subspecies is found in Ontario, Minnesota, Wisconsin, Michigan, and western Quebec.

Wisconsin distribution: Northern counties and Jackson County in the Central Sands.

State rank: S1/S2.

Habitat: Most sites are within jack pine barrens habitat or pine forest. Known from sphagnum bogs elsewhere, but little collecting has been conducted in these habitats in Wisconsin.

Discussion: The species was collected only twice during the period of this study and only in the central part of the state. Cantrall (1968) reported it as common in the Upper Peninsula of Michigan and abundant on wild blackberry in northern Wisconsin.

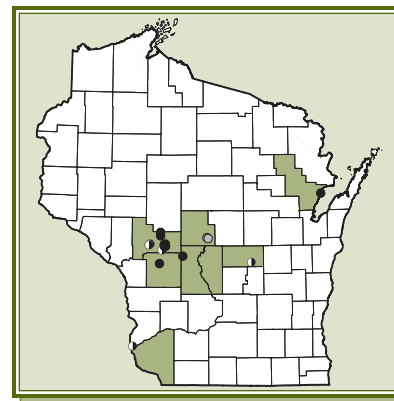
Specimens examined: 32 males, 37 females from 10 sites.

References: Cantrall (1968), Vickery and Kevan (1985).

see Color Plate, p. 37



KATHRYN KIRK



Dendrotettix quercus Packard

Post Oak Grasshopper

Description: Short-winged, medium-sized, brown grasshopper, with a large head. Femora red below. Tibiae green, with yellow basal rings.

Range: Nebraska and Texas east to Tennessee and southern Ontario.

Wisconsin distribution: Central Plains and Grant County in the Southwest.

State rank: S3/S4.

Habitat: Dry to dry-mesic oak forests. Recorded on bur oak (*Quercus macrocarpa*), northern red oak (*Q. rubra*), and hazel (*Corylus americana*) in Wisconsin (Valek and Coppel 1972a).

Historical note: No collections were made prior to 1947.

Discussion: *D. quercus* population explosions have been implicated in defoliation of young oaks. Macropterous individuals were collected in the Central Plains in August of 1967 and 1977. This is an arboreal species that often may be overlooked in the forest.

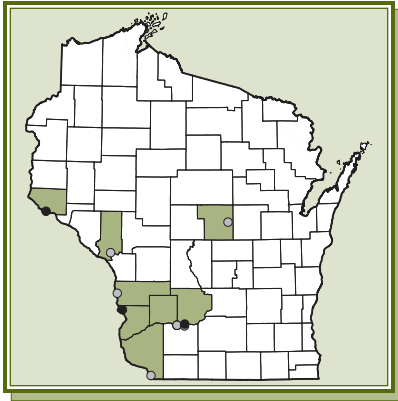
Specimens examined: 47 males, 27 females from 22+ sites.

References: Valek and Coppel (1972a, 1972b), Vickery and Kevan (1985).

see Color Plate, p. 37



BART DREES



***Hesperotettix viridis
pratensis* Scudder**
Purplestriped Grasshopper

Description: Medium-sized green grasshopper, with orange bands on femora and blue-green tibiae. Narrow forewings do not reach end of abdomen.

Range: From central Mexico to British Columbia and western Ontario across the U.S., possibly with the exception of the most northeastern states. The subspecies *H. v. pratensis* covers the northern portion of the range south to Oklahoma.

Wisconsin distribution: Western Uplands.

State rank: S2?.

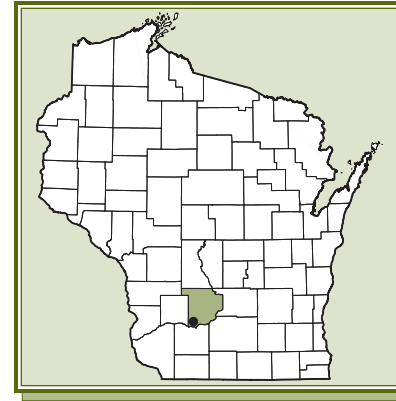
Habitat: Dry prairie and sand barrens associated with major rivers.

Discussion: Nine of the 13 collections were prior to 1920. The three recent collections were from sand terraces along the Mississippi and Wisconsin Rivers, and a bluff prairie along the Mississippi River. Cantrall (1968) reported the species from Michigan, including along the Wisconsin border with the Upper Peninsula, so we expect to find individuals farther east and north of the recorded counties. Adults are collected July 5-August 28.

Specimens examined: 23 males, 14 females from 9 sites.

References: Hart and Gleason (1907), Cantrall (1968), Vickery and Kevan (1985).

see Color Plate, p. 37



***Hesperotettix speciosus*
(Scudder)**
**Western Grassgreen
Grasshopper**

Description: Medium-sized, robust-bodied, green grasshopper with a central pink stripe on pronotum. Forewings do not reach end of abdomen. Dorsal surface of femora red. Tibiae green.

Range: New Mexico and Texas to Montana and east to Illinois, Iowa, and Minnesota.

Wisconsin distribution: One specimen collected July 31, 2000, from Sauk County.

State rank: S1/S2.

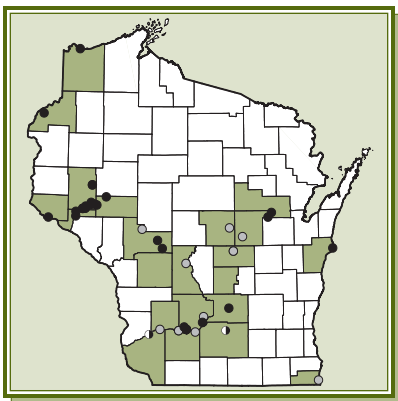
Habitat: The site is at the edge of oak woods on a south-facing bluff above extensive sand prairie on the terrace of the Wisconsin River.

Discussion: There are few sites reported for this species in the Upper Midwest. Somes (1914) reported *H. speciosus* along the Mississippi River in Minnesota and northern Iowa. Hart and Gleason (1907) found it along the Illinois River.

Specimens examined: 1.

References: Hart and Gleason (1907), Somes (1914), Blatchley (1920), Hebard (1934), Vickery and Kevan (1985).





***Melanoplus angustipennis* (Dodge)**
Narrow-winged Sand Grasshopper

Description: Long-winged, medium-sized grasshopper of gray and yellow color, with narrow forewings and red or blue tibiae.

Range: Alberta and Ontario south to New Mexico, Texas, and the fall-line Sandhills of the Carolinas.

Wisconsin distribution: Represented in all the large areas of sand deposits in the Northern Highlands and the Central Plains. Also found on sand terraces of the Mississippi, Wisconsin, and Chippewa rivers and Lake Michigan dunes.

State rank: S4?.

Habitat: Sand prairie, dunes, and pine/oak barrens.

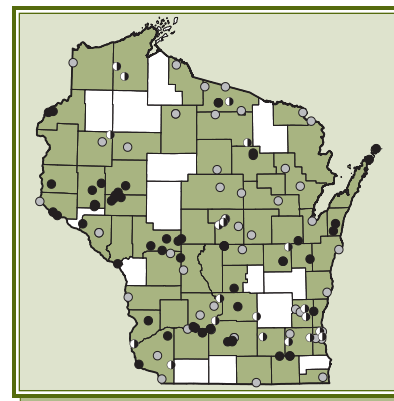
Historical note: A 1912 specimen labeled "Kenosha dune region" is from a narrow sand dune area of the southern Lake Michigan shoreline created by glacial Lake Chicago. This area is now highly disturbed and existence of the species at the site is unlikely.

Discussion: Probably secure in large areas of sandy habitat in the state.

Specimens examined: 64 males, 22 females from 42 sites.

References: Blatchley (1920), Hebard (1934), Vickery and Kevan (1985).

see Color Plate, p. 35



***Melanoplus bivittatus* (Say)**
Twostriped Grasshopper

Description: Large grasshopper with two converging pale lines on dorsal surface of head, pronotum, and forewings. Forewings extend to apex of abdomen or may be slightly shorter.

Range: Widely distributed across North America.

Wisconsin distribution: Statewide.

State rank: S5.

Habitat: Herbaceous vegetation in forest, grassland, roadside, and old field.

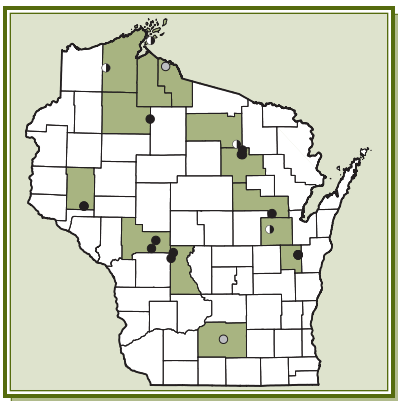
Discussion: This is a common and abundant species that occasionally may become an agricultural pest. Adults usually are present July through September, with an early collection date of June 10 in Dunn County.

Specimens examined: 151 collection records, 54 of these after 1993.

References: Blatchley (1920), Vickery and Kevan (1985), Pfadt (1994).

see Color Plate, p. 36





***Melanoplus borealis*
borealis (Fieber)**

Northern Grasshopper

Description: Small to medium-sized dark grasshopper, with forewings extending from $\frac{3}{4}$ the length to near apex of abdomen. Femora red/orange below. Tibiae reddish to yellowish.

Range: Across Canada south to Minnesota, Wisconsin, Iowa, Pennsylvania, and Ohio.

Wisconsin distribution: Scattered records south to the Central Plains.

State rank: S3?.

Habitat: Marsh, bog, and grassy sandy areas in coniferous forest.

Historical Note: Hebard (1934) identified a specimen from Dane County in 1912, now at ACNAT. The species may have ranged further south in the state when wetland habitats were less fragmented than they are today.

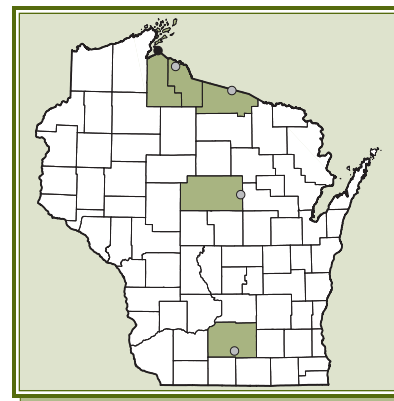
Discussion: Wisconsin collections are from June 10 to August 15.

Specimens examined: 25 males, 19 females from 17 sites.

References: Somes (1914), Blatchley (1920), Hebard (1934), Vickery and Kevan (1985).



see Color Plate, p. 37



***Melanoplus bruneri*
Scudder**

Bruner's Grasshopper

Description: Long-winged, medium-sized, brown grasshopper, with hump on the sternum similar to *M. sanguinipes*. Tibiae red or usually pink.

Range: Alaska to New Brunswick, south in mountain meadows into northern Arizona and New Mexico, eastward to Iowa, northern Minnesota, Wisconsin, and Michigan.

Wisconsin distribution: Ashland County in the Lake Superior Lowland is the only recent collection (1996).

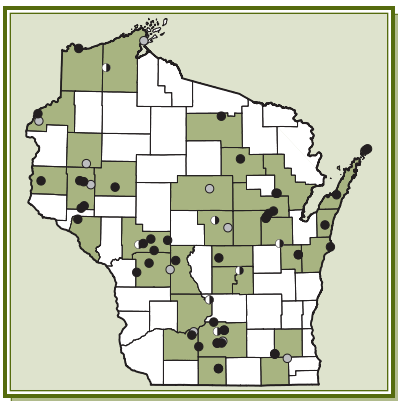
State rank: S1/S2.

Habitat: Known from shrubby areas of the Upper Peninsula and Isle Royale in Michigan. The Ashland County site is an undisturbed coastal barrier sand spit in Lake Superior with low shrubs and pines on a system of beaches and dunes.

Discussion: Vilas, Iron, and Marathon counties were collected before 1920. Hebard identified a specimen in ACNAT taken in 1914 from Dane County in the southern part of the state. The species may have been more widespread in the early 1900s. Froeschner (1954) reported its presence in western Iowa, and Pfadt (1994) reported an outbreak occurred in north central Minnesota in 1921.

Specimens examined: 4.

References: Blatchley (1920), Hebard (1934), Froeschner (1954), Vickery and Kevan (1985), Pfadt (1994).



Melanoplus confusus
Scudder
Little Pasture Grasshopper

Description: Long-winged, medium-sized, grayish grasshopper, with shiny black patch behind eye and a particularly thick prosternal tubercle. Tibiae color variable.

Range: British Columbia to Maine, south to Virginia, Kentucky, and Texas.

Wisconsin distribution: Widely distributed across the state.

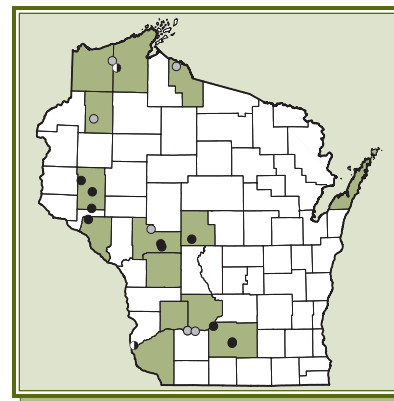
State rank: S5.

Habitat: Found in a wide range of habitats, including remnant prairie, pine and oak barrens, dry forest, sand beach, disturbed areas, and old fields.

Discussion: Both red and blue-legged individuals are present in Wisconsin. An early summer species, adults were found May 23 in Jackson County.

Specimens examined: 65.

References: Somes (1914), Blatchley (1920), Froeschner (1954), Vickery and Kevan (1985), Pfadt (1994).



Melanoplus dawsoni
(Scudder)
Dawson's Grasshopper

Description: Small, robust-bodied, short-winged brown grasshopper that is bright yellow below. Abdomen ringed with black and yellow. Hind tibiae red.

Range: Great Basin in the West to the Great Plains, northern Midwest, and east to New England.

Wisconsin distribution: Western half of the state.

State rank: S2/S4.

Habitat: Open areas such as pine barrens and brushy prairie. Bomar (2001) observed this species to be a common inhabitant of reconstructed prairies in Wisconsin.

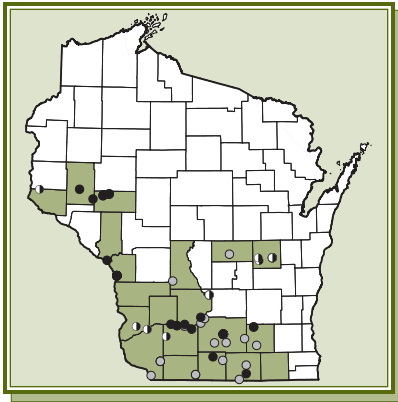
Historical note: Cantrall (1968) lists the species from several sites in the Upper Peninsula of Michigan; however, the only collection from the eastern portion of Wisconsin is one male collected Aug. 15, 1920, in Door County.

Discussion: Hebard (1934) reported a very high percentage of long-winged individuals from northwestern Minnesota. Two of the 44 specimens we examined are macropterous, both from northwestern Wisconsin, collected in 1939 and 1966.

Specimens examined: 32 males, 18 females from 20 sites.

References: Blatchley (1920), Hebard (1934), Vickery and Kevan (1985), Pfadt (1994), Bomar (2001).

see Color Plate, p. 37



***Melanoplus differentialis* (Thomas)**
Differential Grasshopper

Description: Long-winged, large-sized grasshopper, typically yellow-brown in color, with distinctive herringbone pattern on hind femora.

Range: Northern U.S. border to Mexico, east to the Blue Ridge Mountains and the New Jersey coast.

Wisconsin distribution: Common south of the Tension Zone.

State rank: S5.

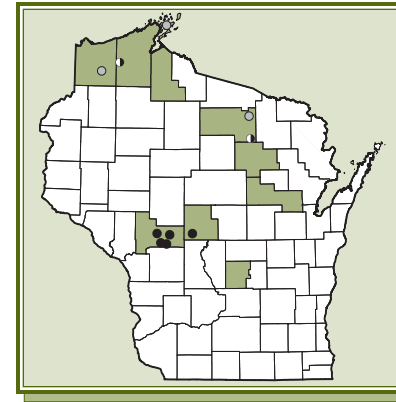
Habitat: Originally restricted to tall vegetation in meadows, swales, and river bottoms, but now widely distributed in weedy, moist habitats, roadsides, and edges of agricultural fields.

Discussion: Adults are collected from June to October. Most Wisconsin collections are from within towns and cities and the species has a history as an agricultural pest.

Specimens examined: 99.

References: Blatchley (1920), Hebard (1934), Vickery and Kevan (1985), Pfadt (1994).

see Color Plate, p. 36



***Melanoplus fasciatus* (F. Walker)**
Huckleberry Grasshopper

Description: Small to medium-sized dark grasshopper, with forewings extending from 2/3 the length to near apex of abdomen. Femora red/orange below and inside and tibiae dull red. Outer surface of femora conspicuously banded.

Range: Alaska to Newfoundland, south to New Jersey, northern Indiana, and Colorado.

Wisconsin distribution: Northern counties and the Central Sands.

State rank: S2?.

Habitat: Hart and Gleason (1907) report this species on blackjack oak (*Q. marilandica*) brush in Illinois. Wisconsin habitats are sandy woods and pine/oak barrens with jack pine, blueberry, sweet fern, and lupine.

Historical Note: The specimen from Ashland County was collected on the Apostle Islands in Lake Superior by the MPM Expedition of 1907. This is the only Wisconsin specimen we have seen from the islands.

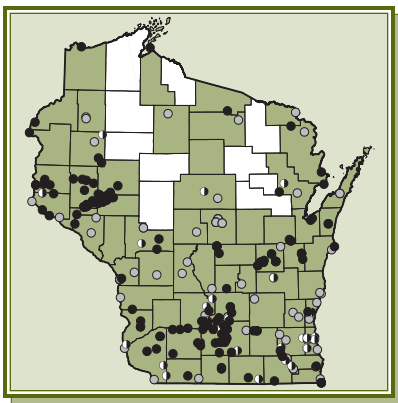
Discussion: *M. fasciatus* is a sedentary species on shrubs. Recent records are only from Jackson and Wood counties in the Central Plains. Adults are collected June 20 through August 24.

Specimens examined: 9 males, 8 females from 13 sites.

References: Hart and Gleason (1907), Somes (1914), Blatchley (1920), Hebard (1934), Vickery and Kevan (1985).



DAN JOHNSON



Melanoplus femurrubrum
(DeGeer)
Redlegged Grasshopper

Description: Long-winged, medium-sized grasshopper of gray and yellow color, typically with red tibiae. Femora have a dark longitudinal stripe in the upper portion. Males distinguished by the bulbous abdominal apex.

Range: North America, except the far North and high mountains. It is especially abundant in southern Wisconsin and Minnesota, and northern Illinois and Iowa, where large populations may develop in response to hot, dry weather (Pfadt 1994).

Wisconsin distribution: Widespread throughout the state.

State rank: S5.

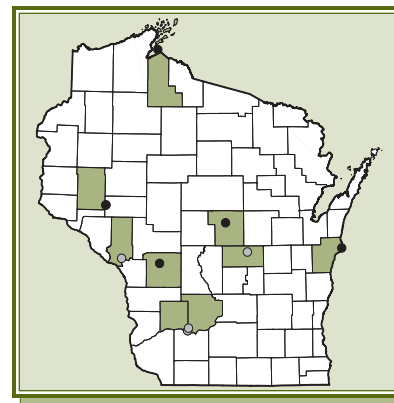
Habitat: Grasslands, roadsides, woods edge, backyards, old fields, wetlands, reconstructed prairies. *M. femurrubrum* is a colonizer of disturbed habitat and may become an occasional pest of crops and gardens.

Discussion: *M. femurrubrum* is very common and abundant, although there is only one current record from the Northern Highlands region.

Specimens examined: 318.

References: Blatchley (1920), Vickery and Kevan (1985), Pfadt (1994).

see Color Plate, p. 36



Melanoplus flavidus
Scudder
Bluelegged Grasshopper

Description: Long-winged, medium to large-sized yellowish grasshopper, with blue tibiae.

Range: Alberta to northwest Indiana, south to Colorado and Kansas.

Wisconsin distribution: Scattered counties on high quality sand habitat.

State rank: S2/S3.

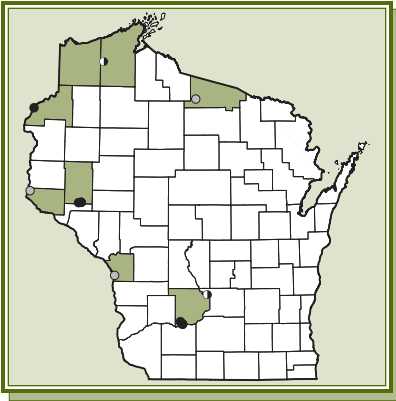
Global Ranking: G4.

Habitat: *M. flavidus* is a xerophytic species: "...as one approaches and enters the wind-excavated hollows of the apex (of the dunes), *M. flavidus* becomes most abundant" (Hart and Gleason 1907). Wisconsin individuals have been found in sandblows, dunes, open sand prairies, and the Ashland County barrier sand spit described under *M. bruneri*.

Discussion: Much of the Wisconsin land that used to support active dunes and sandblows is overgrown with trees or covered by buildings or pine plantations. Those areas that remain are often heavily disturbed by recreational vehicles. Michigan also ranks *M. flavidus* as a Special Concern species (NatureServe April 2001).

Specimens examined: 11 males, 6 females from 10 sites.

References: Hart and Gleason (1907), Blatchley (1920), Vickery and Kevan (1985), NHI (2001), NatureServe (2001).



***Melanoplus foedus
fluiatilis* Bruner**
Sandbar Grasshopper

Description: Long-winged, medium-sized dark grasshopper of greenish brown or gray, with a brown central band on the head and pronotum. Tibiae blue or purple.

Range: Montana, Wyoming, and New Mexico to Iowa, Illinois, and Wisconsin.

Wisconsin distribution: Western half of the state.

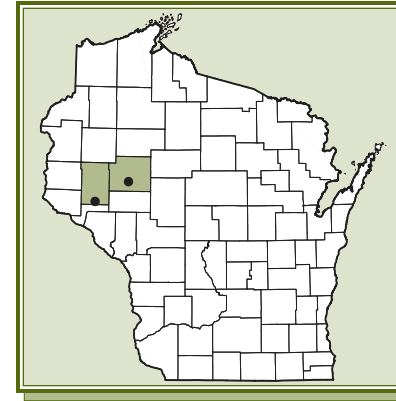
State rank: S2/S3.

Habitat: Sand prairie, sandblows, grassy openings in pines and oak savanna.

Discussion: *Melanoplus foedus* has been known almost exclusively from west of the Mississippi River, where this subspecies is found in river bottom habitats. In Illinois, it was collected along the Mississippi River at the edge of a sandblow (Hart and Gleason 1907). All but two Wisconsin records are along major rivers: the Mississippi, Wisconsin, Chippewa, and St. Croix. Adults are found from July through mid-September. Two males and a female from Vilas County labeled *M. packardii* are included here until such time as the identification can be clarified.

Specimens examined: 17 males, 18 females from 11 sites.

References: Hart and Gleason (1907), Blatchley (1920), Vickery and Kevan (1985).



***Melanoplus gladstoni*
(Scudder)**
Gladston's Grasshopper

Description: Long-winged, medium-sized, dark brown grasshopper, with femora flattened near the base and distinctly banded. Forewings with a line of spots. Tibiae red.

Range: Alberta south to Mexico, east to Iowa and western Wisconsin.

Wisconsin distribution: Dunn and Chippewa counties.

State rank: S2?.

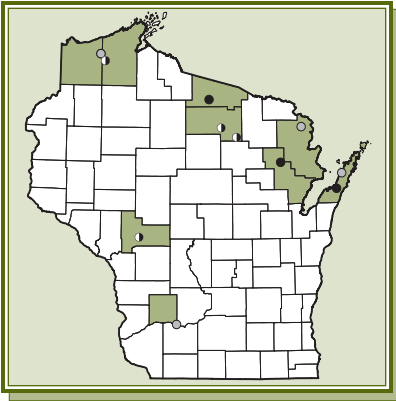
Habitat: Dry grassland, "cobble flats" along the Chippewa River.

Discussion: The two adults were collected in August. These specimens represent an eastward extension of the known range of this species. The flattened hind femur is not easily recognizable in the Wisconsin specimens.

Specimens examined: 1 male, 1 female from 2 sites.

References: Vickery and Kevan (1985), Pfadt (1994), Bomar (2001).





Melanoplus islandicus
Blatchley
Forest Grasshopper

Description: Small short-winged brown and yellow-green grasshopper, with broad pale stripe the length of dorsal abdomen. Tibiae red.

Range: Manitoba, Quebec south to Virginia and Iowa.

Wisconsin distribution: Only one recent collection, Vilas County, though there are several earlier records from the central Northern Highland Region.

State rank: S2/S4.

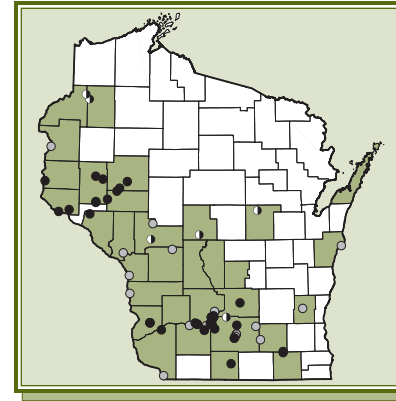
Habitat: Northern-mesic and dry-mesic forest of the interior, grassy opening in jack pine forest of the Lake Superior Coastal Plain.

Historical note: There is one southern Wisconsin record from Lone Rock in 1907.

Discussion: *M. islandicus* is a northern forest species. Vickery and Kevan (1985) state that the colonies are usually small and scattered. Cantrall (1968) calls it "relict, local, and rare" in the Lower Peninsula of Michigan.

Specimens examined: 10 males, 10 females from 10 sites.

References: Blatchley (1920), Cantrall (1968), Vickery and Kevan (1985).



Melanoplus keeleri
***luridus* (Dodge)**
Keeler's Grasshopper

Description: Long-winged, medium-sized grasshopper, with red tibiae and a dark stripe on the femora narrowing toward the base.

Range: Alberta to Nevada and Texas, east across the U.S.

Wisconsin distribution: South, central, and western Wisconsin.

State rank: S5.

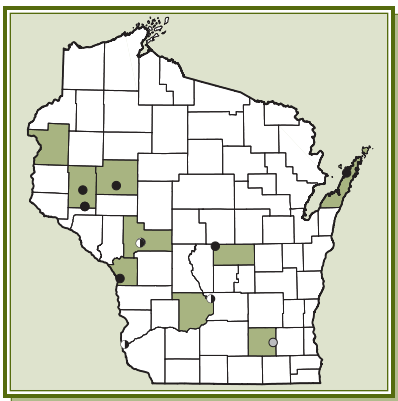
Habitat: Sand barrens, dry prairie, pine barrens, and oak openings.

Discussion: Half of the collection records (35 of 71) are from the most recent collection period.

Specimens examined: 71 males, 32 females from 58 sites.

References: Blatchley (1920), Vickery and Kevan (1985), Pfadt (1994).





***Melanoplus punctulatus griseus* (Thomas)**
Pinetree (Grizzly) Spurthroat Grasshopper

Description: Long-winged, medium-bodied, dark, speckled grasshopper, with large protruding eyes and dull red tibiae.

Range: North Dakota and Ontario to Pennsylvania, south to Arizona and Texas.

Wisconsin distribution: Western Central Plain and Western Uplands, including one site along the forested Niagara Escarpment above Lake Michigan.

State rank: S3?.

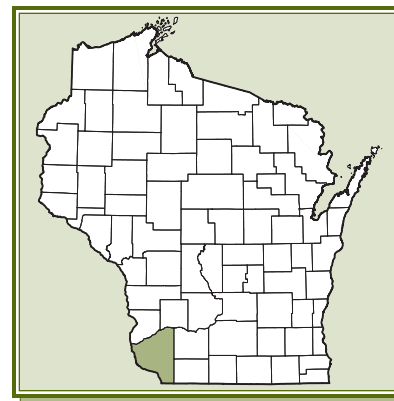
Global rank: G4.

Habitat: Arboreal species of pine forest, swamp conifers (tamaracks), and perhaps oaks in the Southwest. Specimens are occasionally collected at the prairie-forest border, most likely in association with thickets and bramble. The only southeastern Wisconsin record is from an area that was probably good conifer swamp along the Kettle Moraine in 1917. *M. punctulatus griseus* occurs on tamarack in southern Michigan (Cantrall 1968).

Discussion: *M. punctulatus griseus* has been recorded in Polk County "ovipositing in pine stump". Adults are collected late July to mid-October. Because of the mottled coloration, individuals may be overlooked against the gray lichen on tree trunks.

Specimens examined: 13 males, 27 females from 14 sites.

References: Cantrall (1968), Vickery and Kevan (1985).



***Melanoplus rusticus obovatipennis* Blatchley**
Obovatewinged Grasshopper

Description: Small, dark grasshopper, with short, ovate forewings. Femora faintly banded and tibiae dark olive green with a pale basal ring.

Range: Texas and Oklahoma, east to Tennessee, north to Illinois, Wisconsin, Indiana, and Ohio.

Wisconsin distribution: Grant County in the Driftless Area.

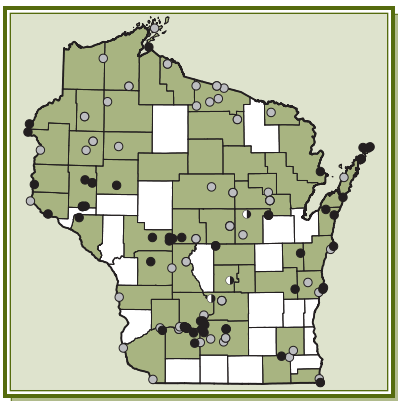
State rank: SH?.

Habitat: Reported from dry forests with oaks and wooded hillsides in other states (Hart and Gleason 1907, Blatchley 1920), though Blatchley suggests it may be found in marsh vegetation late in a dry autumn. Grant County has dry bluff prairies, oak forest, and many valleys and ridges, but the habitat information for these specimens is unknown.

Discussion: *M. rusticus obovatipennis* is a late maturing southern species. Wisconsin specimens collection dates include September 9 and October 6, 1962. Wisconsin is the northern border of the range.

Specimens examined: 1 male, 1 female.

References: Scudder (1899), Blatchley (1920), Hebard (1934).



***Melanoplus sanguinipes sanguinipes* (Fabricius)**
Migratory Grasshopper

Description: Long-winged, medium-bodied grasshopper of gray-brown color, with spots along forewings and a hump on the mesosternum. Distinct notch in subgenital plate. Femora red below. Tibiae red or blue.

Range: Alaska to New Brunswick, south to northern Florida and Mexico

Wisconsin distribution: Throughout the state.

State rank: S5.

Habitat: Sand barrens, pine barrens, Great Lakes dunes, dry prairie, dry-mesic prairie, sand blowouts, oak forest, pine forest, and sand river terraces.

Discussion: Records for the North Central Forest and Northern Highland regions are from 1930 to early 1950s.

Specimens examined: 149.

References: Blatchley (1920), Hebard (1934), Vickery and Kevan (1985).

see Color Plate, p. 36



***Melanoplus scudderi scudderi* (Uhler)**
Scudder's Shortwinged Grasshopper

Description: Small, dull brown grasshopper, with short, ovate forewings. Femora unbanded and tibiae red.

Range: New England to northern Florida, west to Texas, Nebraska, Minnesota, and Ontario. Reported as local and uncommon in the northern Midwest.

Wisconsin distribution: One recent record, from a high quality Lake Michigan dune community.

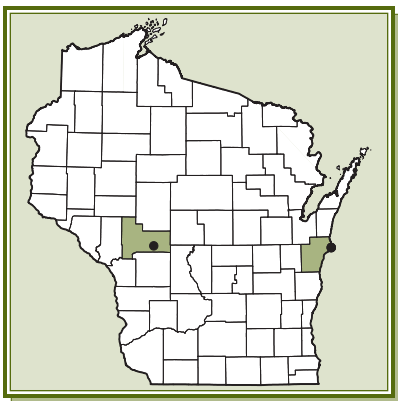
State rank: S?.

Habitat: Manitowoc County sand dunes, scattered oaks, and spreading juniper; Grant County bluff brush prairie within oak forest.

Discussion: Adults were collected in August and September, but the species also was collected July 12, 1976, in Grant County and July 26, 2000, along the Lake Michigan shore. These dates are earlier than any reported in the literature.

Specimens examined: 11 males, 2 females from 4 sites.

References: Gleason and Hart (1907), Somes (1914), Blatchley (1920), Hebard (1934), Vickery and Kevan (1985).



***Melanoplus stonei* Rehn**
Stone's Grasshopper

Description: Long-winged, medium-bodied, dark brown grasshopper, with dark red tibiae.

Range: New Brunswick and Ontario to Michigan, Wisconsin, Minnesota, and Manitoba.

Wisconsin distribution: Jackson and Manitowoc counties.

State rank: S1/S2.

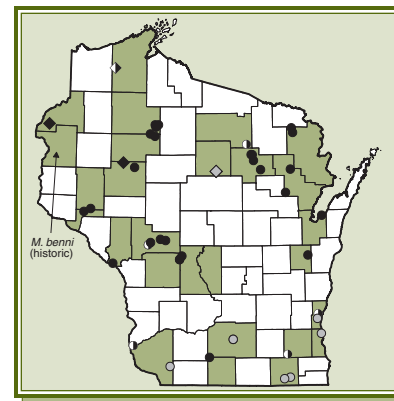
Global rank: G4/G5.

Habitat: Pine/oak barrens and northern dry-mesic forest in the Central Plain sands and Lake Michigan high quality dune habitat with scattered oaks, spreading juniper, and bearberry.

Discussion: Collected July 15, July 26, and August 26. Ontario ranks the species as Special Concern (NatureServe 2001).

Specimens examined: 7 males from 2 sites.

References: Blatchley (1920), Vickery and Kevan (1985), NatureServe (2001).



Melanoplus viridipes
Scudder

Greenlegged Grasshopper

***Melanoplus benni* Otte**

A Grasshopper

Description: Small gray-brown grasshopper, with short elliptical forewings. Femora distinctly banded. Tibiae green, ringed with black and cream basally.

Range: Indiana, Illinois, Iowa north to Minnesota and Wisconsin.

Wisconsin distribution: Found in most regions of the state.

State rank: S5.

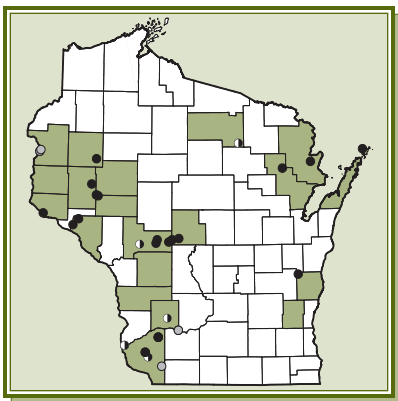
Global rank: (for species *M. viridipes*): G4.

Habitat: Common in northern mesic forest openings, dry-mesic forest openings, and pine/oak barrens.

Discussion: Otte (2002) has recently redefined this group to include two more species in Wisconsin. Specimens from the northern counties of Bayfield, Burnett, Polk, and Lincoln appear to be individuals of *M. benni* (depicted with diamonds in the map above). Another specimen from Polk County appears to be *M. eurycerus*, formerly a subspecies that ranges across the northeastern U.S. Cantrall (1970) considered Lake Michigan to be the western boundary of *M. eurycerus*, a glacial relict in Michigan. The Driftless Area may have played a role in speciation as a refugium where some populations of *M. viridipes* remained isolated within a colder environment than did those populations waiting out the glaciers' retreat in the Appalachians or the southwestern states. Otte (2002) describes the distribution of *M. viridipes* as Indiana, Illinois, Iowa, and Minnesota. *M. benni* has been identified from southern Indiana to northern Michigan and Wisconsin. All of the species in the *viridipes* group, he admits, are so similar that it is very difficult to distinguish between them. Adults are found in June and July in Wisconsin with extreme dates of May 23 and August 16.

Specimens examined: 91 males, 124 females.

References: Blatchley (1920), Hebard (1934), Cantrall (1968), Cantrall (1970), Vickery and Kevan (1985), Otte (2002).



Melanoplus walshii
Scudder
Walsh's Grasshopper

Description: Short-winged, medium-sized, dark gray-brown arboreal grasshopper, with dorsal area of forewings light brown and femora distinctly banded with a narrow extension toward its base. Hind tibiae red.

Range: Virginia, North Carolina, and Georgia north to Michigan, Wisconsin, Minnesota, and South Dakota.

Wisconsin distribution: Mostly collected in the western half of the state, also in the Northeast.

State rank: S5.

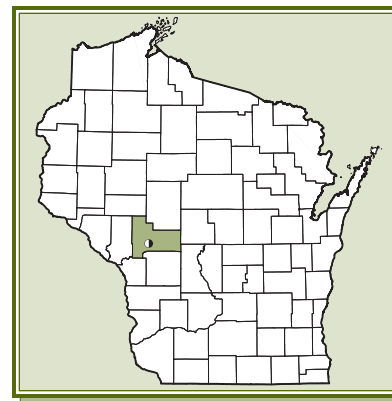
Global rank: G4/G5.

Habitat: Openings in northern dry to dry-mesic forest, pine and oak barrens, and prairie remnants.

Discussion: Brachypterous species known to oviposit in wood (Somes1914).

Specimens examined: 40 males, 30 females from 43 sites.

References: Somes (1914), Blatchley (1920), Vickery and Kevan (1985).



Paratylotropidia brunneri
Scudder
A Grasshopper

Description: Short-winged, medium-sized, stout, brown and yellow grasshopper, with two distinct yellow stripes from fastigium of head to forewing tips. Pronotum has prominent lateral carinae. Hind tibiae typically deep red.

Range: Iowa, west central Illinois, possibly southeastern South Dakota ("Dakota"), Missouri, Arkansas, Texas, Oklahoma, and Kansas, disjunct to central Wisconsin.

Wisconsin distribution: Jackson County on the border of the Central Plain and the Western Upland.

State rank: S1?.

Global rank: G4/G5.

Habitat: Collected in a forested area along the Black River where the river cuts between the sandstone uplands of the Driftless Area to the west and the flat sand plain to the east. Lowland forest is interspersed with white pine-red maple stands along the high ground. *M. punctulatus griseus* and *M. viridipes* were taken from the same site.

Discussion: Rehn and Rehn (1943) state, "It is quite possible the northern boundary of the distribution of brunneri will be found to coincide approximately with the border of the Wisconsin glaciation." The Wisconsin site is about 12 miles in from the boundary of the Driftless Area.

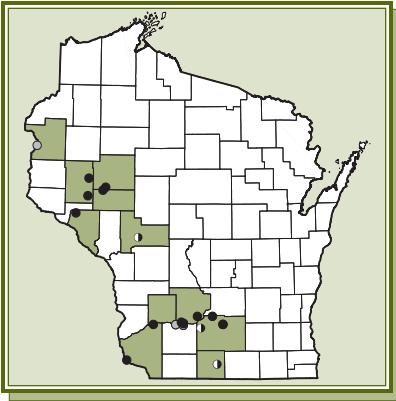
Specimens examined: 2 females, 1 male caught by malaise trap July 6, 1976. These specimens are, on average, smaller than the Iowa specimens at the ACNAT.

References: Scudder (1897), Rehn and Rehn (1943), Helfer (1953).

see Color Plate, p. 38



KATHRYN KIRK



***Phoetaliotes
nebrascensis* (Thomas)**
Largeheaded Grasshopper

Description: Short-winged, medium-sized, light gray grasshopper, with very large head relative to size of body. Short forewings pointed and inrolled. Tibiae blue.

Range: British Columbia to Michigan and south to Texas and Arizona.

Wisconsin distribution: Western Upland portion of the Wisconsin range of tallgrass prairie.

State rank: S2/S4.

Habitat: With few exceptions, collected on dry hill prairies and sand prairie on river terraces.

Discussion: Feeds on grasses, preferring lush, tall grassy areas (Pfadt 1994). In Wisconsin, tallgrass prairie remnants are few and prairie habitat is mostly confined to rocky and sandy substrates. The species is found also in marshes and swales in Michigan, Iowa, and Minnesota (Cantrall 1968, Somes 1914). Little collecting has been done in these habitats in Wisconsin.

During this study *P. nebrascensis* was collected at 13 dry prairie sites.

Specimens examined: 70 males, 7 females from 18 sites.

References: Vickery and Kevan (1985), Pfadt (1994), NHI (2001).

see Color Plate, p. 38

GRASSHOPPER

SPECIES ACCOUNTS



KATHRYN MURK

Acridinae

Gomphocerinae

Cyrtacanthacridinae

Melanoplinae

OEDIPODINAE

ERIC EPSTEIN